

SYNONYMY AND AN EMENDATION IN *ELEODES* (COLEOPTERA: TENEBRIONIDAE)

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ABSTRACT

The original spelling for the subgenus *Arpeleodes* (of the genus *Eleodes*) is corrected to now read *Ardeleodes*. *Eleodes bryanti* Blaisdell and *E. palmerleensis* Blaisdell are synonymized under *E. beameri* Blaisdell. Relationships are discussed between the subgenera *Holeleodes*, *Steneleodes*, and *Metablapyllis*, but judgement is reserved until several Mexican species can be compared.

Blaisdell (1937:128) designated the subgenus *Arpeleodes* for a single species from Baja California. Although the spelling *Arpeleodes* appears first in Blaisdell's paper, the spelling *Ardeleodes* follows in 3 places. In addition, *ard-* is a Greek root, whereas *arp-* is not, and it seems apparent that the first spelling is a typographical error. Therefore, *Arpeleodes*, which appears in catalogs (Gebien 1938:63) and check-lists (Papp 1961:115; Tanner 1961:75), should be replaced with *Ardeleodes* Blaisdell.

In the same paper (p. 132) Blaisdell erected the subgenus *Holeleodes* for 3 species which he described from southeastern Arizona and designated *E. beameri* Blaisdell as type species. The holotype (male) of *beameri* came from the Huachuca Mountains, and the allotype (female) came from the Chiricahua Mountains (Cochise County, Arizona). Blaisdell mentioned 9 paratypes "with same data" without indicating the exact locality. The type series of *E. bryanti* is from the Graham Mountains, Graham County, Arizona (female holotype, male allotype, 7 paratypes). *E. palmerleensis* is based on a female holotype and male allotype from near Palmerlee (Miller Canyon, Huachuca Mountains, *vide* J. N. Knull). Blaisdell separated *beameri* from *bryanti* on the form of the pubescent pads of the protarsus and mesotarsus, while *palmerleensis* was distinguished from the other 2 by its "thicker integuments".

The tarsal pads of numerous specimens we studied vary from the flat, truncate ones of *beameri* to the irregular tufts of *bryanti*, with many intermediates. This is true of series of specimens taken together at 4 different locations. It seems clear that this tarsal variation is intraspecific in nature, perhaps due to wear with age or, in some instances, to matting of the setae. Brief soaking in ether often drastically changes the appearance of the pads. The "thicker integuments" of *palmerleensis* suggest that *bryanti* and *beameri* were described from slightly teneral individuals. Mark-release studies of *E. beameri* in the Chiricahua Mountains show that 10-20% of all individuals are teneral at any given time, and that individuals remain teneral for at least 6 weeks (Doyen and Tschinkel, unpublished data). The high incidence of tenerals was also observed by Bryant in a personal communication to Blaisdell in 1937. For these reasons the names *E. bryanti* Blaisdell and *E. palmerleensis* Blaisdell are placed as synonyms of *E. beameri* Blaisdell.

Blaisdell judged the placement of the subgenus *Holeleodes* ("should follow *Steneleodes* in our lists") on the basis of the exposed genital segment

of the holotype of *E. palmerleensis*. Genitalia preparations of several specimens of *E. beameri* reveal similarities to *Metablapylis* as well as *Steneleodes*. The ovipositor of *beameri* (Fig. 1) is similar to that of *Metablapylis* (e.g. *nigrina* LeC.) in general shape, but the gonostyli are reduced as in *Steneleodes* (e.g. *longicollis* LeC.). The aedeagus of *beameri* resembles that of *longicollis* in the reflexed tips of the apicale and clavae. At present it seems best to reserve judgement on the taxonomic position of *Holeleodes* until several Mexican species can be compared.

Collection records show that *E. beameri* is common from about June to November at higher elevations in the mountains of southeastern Arizona. In addition to the localities mentioned above, specimens are known from Madera Canyon in the Santa Rita Range, Pima County. Two individuals from the mountains west of Durango, Durango, Mexico, suggest that the species also occurs widely in the Sierra Madre Occidental.

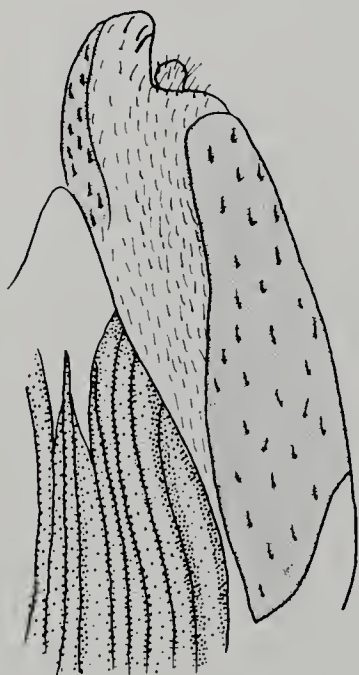


Fig. 1. Dorsal view of the left valve of the ovipositor of *E. beameri* Blaisdell from Rustlers Park, Chiricahua Mountains, Cochise County, Arizona.

LITERATURE CITED

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